

The “F1 medals” proposal – a historical perspective

Real results are in black, altered results in grey (plus medal totals G – S – B). Changes to the status quo are highlighted. For the purposes of this assessment Michael Schumacher’s disqualification from the World Championship in 1997 has been ignored. Text in blue indicates the point in the season the championship was settled and whether this would change with the medals system.

1950	Giuseppe Farina (Alfa Romeo)	Juan-Manuel Fangio (Alfa Romeo)	Luigi Fagioli (Alfa Romeo)
1950	Giuseppe Farina (Alfa Romeo)	Juan-Manuel Fangio (Alfa Romeo)	Johnnie Parsons (Kurtis-Offenhauser)
	3 – 0 – 0 (won title with a fourth)	3 – 0 – 0	1 – 0 – 0

The championship was settled in the final race in Italy. The medal system would make no difference

1951	Juan-Manuel Fangio (Alfa Romeo)	Alberto Ascari (Ferrari)	Froilan Gonzalez (Ferrari)
1950	Juan-Manuel Fangio (Alfa Romeo)	Alberto Ascari (Ferrari)	Froilan Gonzalez (Ferrari)
	3 – 2 – 0	2 – 2 – 0	1 – 2 – 1

The championship was settled in the final race in Spain. The medal system would make no difference

1952	Alberto Ascari (Ferrari)	Giuseppe Farina (Ferrari)	Piero Taruffi (Ferrari)
1952	Alberto Ascari (Ferrari)	Piero Taruffi (Ferrari)	Troy Ruttman (Kuzma-Offenhauser)
	6 – 0 – 0	1 – 1 – 1	1 – 0 – 0

The championship was settled in the sixth race of eight. The medal system would make no difference

1953	Alberto Ascari (Ferrari)	Juan-Manuel Fangio (Maserati)	Giuseppe Farina (Ferrari)
1953	Alberto Ascari (Ferrari)	Giuseppe Farina (Ferrari)	Juan-Manuel Fangio (Maserati)
	5 – 0 – 0	1 – 3 – 1	1 – 3 – 0

The championship was settled in the seventh race of nine. The medal system would make no difference.

1954	Juan-Manuel Fangio (Maserati)	Froilan Gonzalez (Ferrari)	Mike Hawthorn (Ferrari)
1954	Juan-Manuel Fangio (Maserati)	Froilan Gonzalez (Ferrari)	Mike Hawthorn (Ferrari)
	6 – 0 – 1	1 – 2 – 2	1 – 3 – 0

The championship was settled in the seventh race of nine. The medal system would make no difference.

1955	Juan-Manuel Fangio (Mercedes-Benz)	Stirling Moss (Mercedes-Benz)	Eugenio Castellotti (Ferrari)
1955	Juan-Manuel Fangio (Mercedes-Benz)	Maurice Trintignant (Ferrari)	Stirling Moss (Mercedes-Benz)
	4 – 1 – 0	1 – 2 – 1	1 – 2 – 0

The championship was settled in the last race. It would have been settled **one race earlier** with the medal system

1956	Juan-Manuel Fangio (Ferrari)	Stirling Moss (Maserati)	Peter Collins (Ferrari)
1956	Juan-Manuel Fangio (Ferrari)	Peter Collins (Ferrari)	Stirling Moss (Maserati)
	3 – 2 – 0	2 – 3 – 0	2 – 1 – 1

The championship was settled in the last race. The medal system would make no difference.

1957	Juan-Manuel Fangio (Maserati)	Stirling Moss (Vanwall)	Luigi Musso (Lancia-Ferrari)
1957	Juan-Manuel Fangio (Maserati)	Stirling Moss (Vanwall)	Tony Brooks (Vanwall)
	4 – 2 – 0	3 – 0 – 0	1 – 1 – 0

The championship was settled in the sixth of eight races. The medal system would make no difference.

1958	Mike Hawthorn (Ferrari)	Stirling Moss (Vanwall)	Tony Brooks (Vanwall)
1958	Stirling Moss (Vanwall)	Tony Brooks (Vanwall)	Mike Hawthorn (Ferrari)
	4 – 1 – 0	3 – 0 – 0	1 – 5 – 1

The championship was settled in the last race. The medal system would make no difference.

1959	Jack Brabham (Cooper-Climax)	Tony Brooks (Ferrari)	Stirling Moss (Cooper-Climax)
1959	Jack Brabham (Cooper-Climax)	Tony Brooks (Ferrari)	Stirling Moss (Cooper-Climax)
	2 – 1 – 2	2 – 1 – 1	2 – 1 – 0

The championship was settled in the last race. The medal system would make no difference.

1960	Jack Brabham (Cooper-Climax)	Bruce McLaren (Cooper-Climax)	Stirling Moss (Lotus-Climax)
1960	Jack Brabham (Cooper-Climax)	Stirling Moss (Lotus-Climax)	Bruce McLaren (Cooper-Climax)
	5 – 0 – 0	2 – 0 – 1	1 – 3 – 2

The championship was settled in the eighth of 10 races. The medal system would make no difference.

1961	Phil Hill (Ferrari)	Wolfgang Von Trips (Ferrari)	Stirling Moss (Lotus-Climax)
1961	Phil Hill (Ferrari)	Wolfgang Von Trips (Ferrari)	Stirling Moss (Lotus-Climax)
	2 – 2 – 2	2 – 2 – 0	2 – 0 – 0

The championship was settled in the seventh of 8 races. The medal system would make no difference.

1962	Graham Hill (BRM)	Jim Clark (Lotus-Climax)	Bruce McLaren (Cooper-Climax)
1962	Graham Hill (BRM)	Jim Clark (Lotus-Climax)	Bruce McLaren (Cooper-Climax)
	4 – 2 – 0	3 – 0 – 0	1 – 1 – 3

The championship was settled in the last race. The medal system would make no difference.

1963	Jim Clark (Lotus-Ford)	Graham Hill (BRM)	Richie Ginther (BRM)
1963	Jim Clark (Lotus-Ford)	Graham Hill (BRM)	John Surtees (Ferrari)
	7 – 1 – 1	2 – 0 – 3	1 – 1 – 1

The championship was settled in the seventh of the 10 races. The medal system would make no difference

1964	John Surtees (Ferrari)	Graham Hill (BRM)	Jim Clark (Lotus-Climax)
1964	Jim Clark (Lotus-Climax)	John Surtees (Ferrari)	Graham Hill (BRM)
	3 – 0 – 0	2 – 3 – 1	2 – 3 – 0

The championship was settled in the last race. The medal system would make no difference.

1965	Jim Clark (Lotus-Ford)	Graham Hill (BRM)	Jackie Stewart (BRM)
1965	Jim Clark (Lotus-Ford)	Graham Hill (BRM)	Jackie Stewart (BRM)
	6 – 0 – 0	2 – 3 – 1	1 – 3 – 1

The championship was settled in the seventh of the 10 races. The medal system would make no difference

1966	Jack Brabham (Brabham-Repco)	John Surtees (Ferrari)	Jochen Rindt (Cooper-Maserati)
1966	Jack Brabham (Brabham-Repco)	John Surtees (Ferrari)	Jim Clark (Lotus-Ford)
	4 – 1 – 0	2 – 1 – 1	1 – 0 – 1

The championship was settled in the seventh of the nine races. The medal system would make no difference

1967 Denny Hulme (Brabham-Repco)
1967 **Jim Clark (Lotus-Ford)**
4 – 0 – 1

Jack Brabham (Brabham-Repco)
Jack Brabham (Brabham-Repco)
2 – 4 – 0

Jim Clark (Lotus-Ford)
Denny Hulme (Brabham-Repco)
2 – 3 – 3

The championship was settled in the last race. The medal system would make no difference.

1968 Graham Hill (Lotus-Ford)
1968 Graham Hill (Lotus-Ford)
3 – 3 – 0

Jackie Stewart (Matra-Ford)
Jackie Stewart (Matra-Ford)
3 – 0 – 1

Denny Hulme (McLaren-Ford)
Denny Hulme (McLaren-Ford)
2 – 1 – 0

The championship was settled in the last race. The medal system would make no difference.

1969 Jackie Stewart (Matra-Ford)
1969 Jackie Stewart (Matra-Ford)
6 – 1 – 1

Jacky Ickx (Ferrari)
Jacky Ickx (Ferrari)
2 – 2 – 1

Bruce McLaren (McLaren-Ford)
Jochen Rindt (Lotus-Ford)
1 – 1 – 1

The championship was settled in the eighth of 11 races. The medal system would make no difference.

1970 Jochen Rindt (Lotus-Ford)
1970 Jochen Rindt (Lotus-Ford)
5 – 0 – 0

Jacky Ickx (Ferrari)
Jacky Ickx (Ferrari)
3 – 1 – 1

Clay Regazzoni (Ferrari)
Clay Regazzoni (Ferrari)
1 – 3 – 0

The championship was settled in the penultimate race. It would have been settled **two race earlier** with the medal system

1971 Jackie Stewart (Tyrrell-Ford)
1971 Jackie Stewart (Tyrrell-Ford)
6 – 1 – 0

Ronnie Peterson (March-Ford)
Francois Cevert (Tyrrell-Ford)
1 – 2 – 1

Francois Cevert (Tyrrell-Ford)
Jacky Ickx (Ferrari)
1 – 1 – 1

The championship was settled in the eighth of 11 races. The medal system would make no difference.

1972 Emerson Fittipaldi (Lotus-Ford)
1972 Emerson Fittipaldi (Lotus-Ford)
5 – 2 – 1

Jackie Stewart (Tyrrell-Ford)
Jackie Stewart (Tyrrell-Ford)
4 – 1 – 0

Denny Hulme (McLaren-Ford)
Denny Hulme (McLaren-Ford)
1 – 2 – 4

The championship was settled in the 10th of 12 races. . The medal system would make no difference.

1973	Jackie Stewart (Tyrrell-Ford)	Emerson Fittipaldi (Lotus-Ford)	Ronnie Peterson (Lotus-Ford)
1973	Jackie Stewart (Tyrrell-Ford)	Ronnie Peterson (Lotus-Ford)	Emerson Fittipaldi (Lotus-Ford)
	5 – 2 – 1	4 – 2 – 1	3 – 3 – 2

The championship was settled in the 13th of 15 races. It would have been settled **one race later** with the medal system

1974	Emerson Fittipaldi (McLaren-Ford)	Clay Regazzoni (Ferrari)	Jody Scheckter (Tyrrell-Ford)
1974	Emerson Fittipaldi (McLaren-Ford)	Ronnie Peterson (Lotus-Ford)	Carlos Reutemann (Brabham-Ford)
	3 – 2 – 2	3 – 0 – 1 (4 th)	3 – 0 – 1 (6 th)

The championship was settled in final race. The medal system would make no difference.

1975	Niki Lauda (Ferrari)	Emerson Fittipaldi (McLaren-Ford)	Carlos Reutemann (Brabham-Ford)
1975	Niki Lauda (Ferrari)	Emerson Fittipaldi (McLaren-Ford)	James Hunt (Hesketh-Ford)
	5 – 1 – 2	2 – 4 – 0	1 – 3 – 0

The championship was settled in the 13th of 14 races. The medal system would make no difference.

1976	James Hunt (McLaren-Ford)	Niki Lauda (Ferrari)	Jody Scheckter (Tyrrell-Ford)
1976	James Hunt (McLaren-Ford)	Niki Lauda (Ferrari)	Jody Scheckter (Tyrrell-Ford)
	6 – 1 – 1	5 – 2 – 2	1 – 4 – 0

The championship was settled in the final race. The medal system would make no difference.

1977	Niki Lauda (Ferrari)	Jody Scheckter (Wolf-Ford)	Mario Andretti (Lotus-Ford)
1977	Mario Andretti (Lotus-Ford)	Niki Lauda (Ferrari)	Jody Scheckter (Wolf-Ford)
	4 – 1 – 0	3 – 6 – 1	3 – 2 – 4

The championship was settled in the 15th of 17 races. It would have been settled **two races later** with the medal system

1978	Mario Andretti (Lotus-Ford)	Ronnie Peterson (Lotus-Ford)	Carlos Reutemann (Ferrari)
1978	Mario Andretti (Lotus-Ford)	Carlos Reutemann (Ferrari)	Ronnie Peterson (Lotus-Ford)
	6 – 1 – 0	4 – 0 – 3	2 – 4 – 1

The championship was settled in the 14th of 16 races. It would have been settled **one race earlier** with the medal system.

1979	Jody Scheckter (Ferrari)	Gilles Villeneuve (Ferrari)	Alan Jones (Williams-Ford)
1979	Alan Jones (Williams-Ford)	Gilles Villeneuve (Ferrari)	Jody Scheckter (Ferrari)
	4 – 0 – 1	3 – 4 – 0	3 – 3 – 0

The championship was settled in the 13th of 15 races. It would have been settled **two races later** with the medal system

1980	Alan Jones (Williams-Ford)	Nelson Piquet (Brabham-Ford)	Carlos Reutemann (Williams-Ford)
1980	Alan Jones (Williams-Ford)	Nelson Piquet (Brabham-Ford)	Rene Arnoux (Renault)
	5 – 4 – 2	3 – 2 – 1	2 – 1 – 0

The championship was settled in the 13th of 14 races. It would have been settled **one race later** with the medal system

1981	Nelson Piquet (Brabham-Ford)	Carlos Reutemann (Williams-Ford)	Alan Jones (Williams-Ford)
1981	Alain Prost (Renault)	Nelson Piquet (Brabham-Ford)	Carlos Reutemann (Williams-Ford)
	3 – 2 – 1	3 – 1 – 3	2 – 3 – 2

The championship was settled in the final race. The medal system would make no difference.

1982	Keke Rosberg (Williams-Ford)	Didier Pironi (Ferrari)	John Watson (McLaren-Ford)
1982	Didier Pironi (Ferrari)	John Watson (McLaren-Ford)	Alain Prost (Renault)
	2 – 2 – 2	2 – 2 – 1	2 – 2 – 0

The championship was settled in the final race. The medal system would make no difference.

1983	Nelson Piquet (Brabham-BMW)	Alain Prost (Renault)	Rene Arnoux (Ferrari)
1983	Alain Prost (Renault)	Nelson Piquet (Brabham-BMW)	Rene Arnoux (Ferrari)
	4 – 2 – 1	3 – 3 – 2	3 – 2 – 2

The championship was settled in the final race. The medal system would make no difference.

1984	Niki Lauda (McLaren-TAG)	Alain Prost (McLaren-TAG)	Elio de Angelis (Lotus-Renault)
1984	Alain Prost (McLaren-TAG)	Niki Lauda (McLaren-TAG)	Nelson Piquet (Brabham-BMW)
	7 – 1 – 1	5 – 4 – 0	2 – 1 – 1

The championship was settled in the final race. The medal system would make no difference.

1985	Alain Prost (McLaren-TAG)	Michele Alboreto (Ferrari)	Keke Rosberg (Williams-Honda)
1985	Alain Prost (McLaren-TAG)	Michele Alboreto (Ferrari)	Ayrton Senna (Lotus-Renault)
	5 – 2 – 4	2 – 4 – 2	2 – 2 – 2

The championship was settled in the 14th of 16 races. The medal system would make no difference.

1986	Alain Prost (McLaren-TAG)	Nigel Mansell (Williams-Honda)	Nelson Piquet (Williams-Honda)
1986	Nigel Mansell (Williams-Honda)	Alain Prost (McLaren-TAG)	Nelson Piquet (Williams-Honda)
	5 – 2 – 2	4 – 4 – 3	4 – 3 – 3

The championship was settled in the final race. The medal system would make no difference.

1987	Nelson Piquet (Williams-Honda)	Nigel Mansell (Williams-Honda)	Ayrton Senna (Lotus-Honda)
1987	Nigel Mansell (Williams-Honda)	Nelson Piquet (Williams-Honda)	Alain Prost (McLaren-TAG)
	6 – 0 – 1	3 – 7 – 1	3 – 1 – 3

The championship was settled in the 15th of 16 races. It would have been settled **one race earlier** with the medal system

1988	Ayrton Senna (McLaren-Honda)	Alain Prost (McLaren-Honda)	Gerhard Berger (Ferrari)
1988	Ayrton Senna (McLaren-Honda)	Alain Prost (McLaren-Honda)	Gerhard Berger (Ferrari)
	8 – 3 – 0	7 – 7 – 0	1 – 2 – 2

The championship was settled in the 15th of 16 races. The medal system would make no difference.

1989	Alain Prost (McLaren-Honda)	Ayrton Senna (McLaren-Honda)	Riccardo Patrese (Williams-Renault)
1989	Ayrton Senna (McLaren-Honda)	Alain Prost (McLaren-Honda)	Nigel Mansell (Williams-Renault)
	6 – 1 – 0	4 – 6 – 1	2 – 2 – 2

The championship was settled in the 15th of 16 races. The medal system would make no difference.

1990	Ayrton Senna (McLaren-Honda)	Alain Prost (Ferrari)	Nelson Piquet (Benetton-Ford)
1990	Ayrton Senna (McLaren-Honda)	Alain Prost (Ferrari)	Nelson Piquet (Benetton-Ford)
	6 – 2 – 3	5 – 2 – 2	2 – 1 – 1

The championship was settled in the 15th of 16 races. It would have been settled **one race later** with the medal system

1991	Ayrton Senna (McLaren-Honda)	Nigel Mansell (Williams-Renault)	Riccardo Patrese (Williams-Renault)
1991	Ayrton Senna (McLaren-Honda)	Nigel Mansell (Williams-Renault)	Riccardo Patrese (Williams-Renault)
	7 – 3 – 2	5 – 4 – 0	2 – 2 – 4

The championship was settled in the 15th of 16 races. It would have been settled **one race later** with the medal system

1992	Nigel Mansell (Williams-Renault)	Riccardo Patrese (Williams-Renault)	Michael Schumacher (Benetton-Ford)
1992	Nigel Mansell (Williams-Renault)	Ayrton Senna (McLaren-Honda)	Riccardo Patrese (Williams-Renault)
	9 – 3 – 0	3 – 1 – 3	1 – 6 – 2

The championship was settled in the 11th of 16 races. It would have been settled **one race earlier** with the medal system

1993	Alain Prost (Williams-Renault)	Ayrton Senna (McLaren-Ford)	Damon Hill (Williams-Renault)
1993	Alain Prost (Williams-Renault)	Ayrton Senna (McLaren-Ford)	Damon Hill (Williams-Renault)
	7 – 3 – 2	5 – 2 – 0	3 – 4 – 3

The championship was settled in the 14th of 16 races. It would have been settled **one race earlier** with the medal system

1994	Michael Schumacher (Benetton-Ford)	Damon Hill (Williams-Renault)	Gerhard Berger (Ferrari)
1994	Michael Schumacher (Benetton-Ford)	Damon Hill (Williams-Renault)	Gerhard Berger (Ferrari)
	8 – 2 – 0	6 – 5 – 0	1 – 3 – 2

The championship was settled in the final race. It would have been settled **two races earlier** with the medal system

1995	Michael Schumacher (Benetton-Renault)	Damon Hill (Williams-Renault)	David Coulthard (Williams-Renault)
1995	Michael Schumacher (Benetton-Renault)	Damon Hill (Williams-Renault)	Johnny Herbert (Benetton-Renault)
	9 – 1 – 1	4 – 3 – 2	2 – 1 – 1

The championship was settled in the 15th of 17 races. It would have been settled **one race earlier** with the medal system

1996	Damon Hill (Williams-Renault)	Jacques Villeneuve (Williams-Renault)	Michael Schumacher (Ferrari)
1996	Damon Hill (Williams-Renault)	Jacques Villeneuve (Williams-Renault)	Michael Schumacher (Ferrari)
	8 – 2 – 0	4 – 5 – 2	3 – 3 – 2

The championship was settled in the final race. It would have been settled **three races earlier** with the medal system

1997	Jacques Villeneuve (Williams-Renault)	Michael Schumacher (Ferrari)	Heinz-Harald Frentzen (Jordan-Mugen)
1997	Jacques Villeneuve (Williams-Renault)	Michael Schumacher (Ferrari)	David Coulthard (McLaren-Mercedes)
	7 – 0 – 3	5 – 3 – 0	2 – 2 – 0

The championship was settled in the final race. It would have been settled **two races earlier** with the medal system

1998	Mika Hakkinen (McLaren-Mercedes)	Michael Schumacher (Ferrari)	David Coulthard (McLaren-Mercedes)
1998	Mika Hakkinen (McLaren-Mercedes)	Michael Schumacher (Ferrari)	David Coulthard (McLaren-Mercedes)
	8 – 2 – 1	6 – 2 – 3	1 – 6 – 2

The championship was settled in the final race. The medal system would make no difference.

1999	Mika Hakkinen (McLaren-Mercedes)	Eddie Irvine (Ferrari)	Heinz-Harald Frentzen (Jordan-Mugen)
1999	Mika Hakkinen (McLaren-Mercedes)	Eddie Irvine (Ferrari)	David Coulthard (McLaren-Mercedes)
	5 – 2 – 3	4 – 2 – 3	2 – 4 – 0

The championship was settled in the final race. The medal system would make no difference.

2000	Michael Schumacher (Ferrari)	Mika Hakkinen (McLaren-Mercedes)	David Coulthard (McLaren-Mercedes)
2000	Michael Schumacher (Ferrari)	Mika Hakkinen (McLaren-Mercedes)	David Coulthard (McLaren-Mercedes)
	9 – 2 – 1	4 – 7 – 0	3 – 3 – 5

The championship was settled in the 16th of 17 races. It would have been settled **one race earlier** with the medal system

2001	Michael Schumacher (Ferrari)	David Coulthard (McLaren-Mercedes)	Rubens Barrichello (Ferrari)
2001	Michael Schumacher (Ferrari)	Ralf Schumacher (Williams-BMW)	David Coulthard (McLaren-Mercedes)
	9 – 5 – 0	3 – 1 – 1	2 – 3 – 5

The championship was settled in the 13th of 17 races. It would have been settled **one race later** with the medal system

2002	Michael Schumacher (Ferrari)	Rubens Barrichello (Ferrari)	Juan Pablo Montoya (Williams-BMW)
2002	Michael Schumacher (Ferrari)	Rubens Barrichello (Ferrari)	Ralf Schumacher (Williams-BMW)
	11 – 5 – 1	4 – 5 – 1	1 – 1 – 4

The championship was settled in the 11th of 17 races. The medal system would make no difference.

2003	Michael Schumacher (Ferrari)	Kimi Raikkonen (McLaren-Mercedes)	Juan Pablo Montoya (Williams-BMW)
2003	Michael Schumacher (Ferrari)	Juan Pablo Montoya (Williams-BMW)	Rubens Barrichello (Ferrari)
	6 – 0 – 2	2 – 5 – 2	2 – 1 – 5

The championship was settled in the 15th of 16 races. . It would have been settled **one race earlier** with the medal system

2004	Michael Schumacher (Ferrari)	Rubens Barrichello (Ferrari)	Jenson Button (BAR-Honda)
2004	Michael Schumacher (Ferrari)	Rubens Barrichello (Ferrari)	Kimi Raikkonen (McLaren-Mercedes)
	13 – 2 – 0	2 – 7 – 5	1 – 2 – 1

The championship was settled in the 14th of 18 races. It would have been settled **three races earlier** with the medal system

2005	Fernando Alonso (Renault)	Kimi Raikkonen (McLaren-Mercedes)	Michael Schumacher (Ferrari)
2005	Fernando Alonso (Renault)	Kimi Raikkonen (McLaren-Mercedes)	Juan Pablo Montoya (McLaren-Mercedes)
	7 – 5 – 3	7 – 3 – 2	3 – 1 – 1

The championship was settled in the 17th of 19 races. It would have been settled **two races later** with the medal system

2006	Fernando Alonso (Renault)	Michael Schumacher (Ferrari)	Felipe Massa (Ferrari)
2006	Fernando Alonso (Renault)	Michael Schumacher (Ferrari)	Felipe Massa (Ferrari)
	7 – 7 – 0	7 – 4 – 1	2 – 3 – 2

The championship was settled in the final race. The medal system would make no difference.

2007	Kimi Raikkonen (Ferrari)	Lewis Hamilton (McLaren-Mercedes)	Fernando Alonso (McLaren-Mercedes)
2007	Kimi Raikkonen (Ferrari)	Lewis Hamilton (McLaren-Mercedes)	Fernando Alonso (McLaren-Mercedes)
	6 – 2 – 4	4 – 5 – 3	4 – 4 – 4

The championship was settled in the final race. The medal system would make no difference.

2008	Lewis Hamilton (McLaren)	Felipe Massa (Ferrari)	Kimi Raikkonen (Ferrari)
2008	Felipe Massa (Ferrari)	Lewis Hamilton (McLaren)	Kimi Raikkonen (Ferrari)
	6 – 2 – 2	5 – 2 – 3	2 – 2 – 5

The championship was settled in the final race. The medal system would make no difference.